Subject Index 1953–1954

ACCREDITING OF ENGINEERING CURRICULA. N. W. Dougherty 5, 290
AIMS AND CONTENT OF ENGINEERING ECONOMY. A. Lesser, Jr. 5, 307
ANALYSIS OF MINERAL INDUSTRY CURRICULA. J. D. Forrester 5, 332
AN INTEGRATED APPROACH TO BASIC MATHEMATICS. W. R. Van Voorhis 10, 600
ANNUAL MEETING, JUNE 14–18, 1954, UNIVERSITY OF ILLINOIS. R. J. Martin 9, 491
ANNUAL MEETING, UNIVERSITY OF ILLINOIS 7, 354
ARTS AND SCIENCE FOR ENGINEERS. W. Whipple, Jr. 10, 644
ASEE SUMMER SCHOOL SCHEDULE, JUNE, 1954 .....9, 542
ATOMIC ENERGY EDUCATION COMMITTEE REPORT 4, 273
ATTRACTING COMPETENT YOUNG INSTRUCTORS. W. N. Jones 3, 157
AXIOMS OF CURRICULUM CHANGE. H. A. Sawyer, Jr. 10, 610

BOOKS ON MATHEMATICS FOR ENGINEERS. A. F. Puchstein 7, 404

CAN TECHNICAL INSTITUTE GRADUATES SUCCEED IN ENGINEERING COLLEGES. L. F. Smith and L. Lipsett 10, 672
CHEMICAL PROFESSION IN THE USSR. J. G. Tolpin 8, 427
COMPARISON OF AMERICAN WITH EUROPEAN TEACHING METHODS IN ENGINEERING. R. K. Bernhard 8, 423
CONFERENCE ON NUCLEAR PHYSICS IN ENGINEERING EDUCATION. R. W. Houston 10, 573
COOPERATIVE RESEARCH. F. M. Dawson and A. B. Cambel 2, 121
CURRICULUM DESIGNED FOR TODAY'S STUDENT. B. L. Wellman 8, 469

DEPENDENCE OF ENGINEERING LEADERSHIP ON MECHANICS AND PHYSICS. L. E. Grinter 10, 570
DISCUSSION OF PRELIMINARY REPORT OF A.S.E.E. COMMITTEE ON EVALUATION OF ENGINEERING EDUCATION 10, 606
DRAWING DIVISION LOOKS AT FUTURE OF ENGINEERING EDUCATION 8, 435

ECHELONS OF ENGINEERING EDUCATION. K. L. Holderman, J. W. Breneman and E. A. Walker 4, 234
EDUCATIONAL RESEARCH MAY AID ENGINEERING TEACHING. J. D. Axtell, Jr. 8, 465
EDUCATION FOR PROFESSIONAL RESPONSIBILITIES. W. R. Woolrich 1, 9
EDUCATION BENEATH THE SURFACE. R. B. Davis 5, 330
EDUCATION FOR THE ENGINEERING SPECTRUM. R. J. Smith 2, 88
EFFECTIVE COUNSELING FOR ENGINEERING FRESHMEN. R. L. Ritter 10, 636
ENCOURAGEMENT OF FUNDAMENTAL RESEARCH. E. A. Walker, H. L. Hazen, C. F. Prutton and J. W. Barker .1, 17
ENGINEERING CURRICULA—THEN AND NOW. E. Hutchisson 10, 584
ENGINEERING EDUCATION AND ENGINEERING-TRAINING EXAMINATIONS. J. H. Lampe, C. S. Crouse and R. M. Green 2, 95
ENGINEERING EDUCATION—INDUSTRY'S VIEWPOINT. R. H. Leach 3, 174
ENGINEERING LABORATORY COURSES. J. N. Thurston 8, 421
EVALUATION OF ENGINEERING EDUCATION REPORTS 4, 257
EVALUATION OF ENGINEERING EDUCATION SUMMARY 3, 143
EXPERIENCE TELLS ME. J. J. Cronin ..9, 507

FINAL COURSE. A. Boyajian 7, 394
FORECASTING ACADEMIC ACHIEVEMENT. L. E. Drake and W. F. Thomas ..4, 275
FORECAST OF FRESHMEN AND GRADUATES. N. N. Barish 3, 181
FUNDAMENTALS AND PROFESSIONAL THINKING. M. L. Millett, Jr. 8, 431
FUTURE SCIENTISTS OF AMERICA FOUNDATION. H. H. Armsby 3, 159

General Mode of Analysis in Engineering Education. L. M. K. Boelter and G. A. Hawkins 5, 343
General Observations on Cooperative Education. J. W. Hoyt, Jr. and D. G. MacDonald 9, 519
George Westinghouse Award Recipient 1, 51
Graduate Education in Engineering. W. Bollay 8, 455
Graduate Professional Education in Engineering. M. P. O'Brien 9, 545
Graduate Program in Engineering. W. E. Howland and G. A. Hawkins .7, 397
Grease Monkeys or Citizens? E. S. Burdell 9, 527
Grinter, L. E., President, ASEE, 1953–54 .....1, 1

Hammond, H. P.—In Memoriam ...3, 214
How Much Research Should Engineering Schools Do? E. A. Walker 10, 565
Humanistic-Social Division. S. W. Chapman 3, 192

Improving the Product. L. Harrisberger 2, 82
Industrial Summer Opportunities. C. E. Work and H. P. Skamser 10, 581
Industry, Engineers and the First Five Years of Professional Development. L. F. Grant 9, 503
Industry's Interest in more Education for Engineers. L. E. Grinter 9, 496
Instilling Desire for Student Self-Improvement. J. W. Shupe 3, 165
Is Closer Integration an Answer? J. J. Turin 5, 340
It is Time for the Laymen to Come in. J. F. Calvert 7, 362

Keeping Abreast of Advancing Frontiers. A. B. Bronwell 2, 77

Lamme Award Recipient 1, 49
Liberal Education in Professional Curricula. V. M. Hancher 7, 356
Limitations and Possibilities of Accreditation. J. C. Osborn 4, 277

Mastering the Art of Thinking. K. N. Tong 3, 169
Membership Dues. L. E. Grinter 3, 141
Membership Dues, Proposed Amendment on 7, 370
Minutes of Executive Board Meeting 1, 61
Minutes of Executive Board Meeting 2, 127
Minutes of Executive Board Meeting 7, 409
Minutes of General Council Meeting 1, 66
Minutes of General Council Meeting 3, 205
Modern Engineering Physics. J. P. Abbott 8, 442
Motivation in Engineering Education. E. M. Bennett 10, 612

National and Regional Developments in Cooperative Evaluation and Accrediting Activity. E. B. Nyquist 9, 533
National Science Foundation Program. R. A. Morgen 4, 243
Needs for Basic Research in Engineering Science. R. A. Morgen .7, 375

Officers of Councils, Divisions, Sections and Committees. 1953–54 .....2, 131–133
On Education, Engineering and Physics. R. J. Seeger 5, 285
On Engineering Integrity. C. J. Freund 4, 223
Opportunities for the Civil Engineer in Atomic Energy Industry. E. F. Gloyna 10, 590
Opportunities for University Research in Heat Power. R. G. Folsom 9, 539

Physics for the Civil Engineer. N. W. Dougherty 7, 401
Place of Advanced Degree Engineers in Industry. S. L. Scott 9, 523
Professional Collective Bargaining. T. H. Evans 7, 389
Public Relations Program for the Engineering Profession. G. K. Gillan 10, 628

Rating Teaching Personnel for Advancement Purposes. E. H. Brock 10, 593
Report of Committee on Society Finance 1, 37
Report of ECAC Manpower Committee 3, 217
Report of the Secretary 1, 53
Report of the Treasurer 2, 123

REPORT OF THE VICE PRESIDENTS 2, 116
REPORT ON THE UNIVERSITY OF ILLINOIS SUMMER INSTITUTE CONFERENCE ON SOLID STATE PHYSICS IN THE ENGINEERING CURRICULUM. G. Murphy 9, 494
RESEARCH IN A LARGE UNIVERSITY. R. Parmenter 4, 248
RESEARCH IN SMALL COLLEGES. W. E. Wilson and R. H. Cook 4, 253
RESIDENCE CREDIT REQUIREMENTS. G. B. Hoadley 5, 314
ROLE OF GRAPHICS IN ENGINEERING EDUCATION. F. A. Heacock 10, 631

SERVOMECHANISMS IN THE UNDERGRADUATE CURRICULUM. C. H. Dawson 10, 617
STIMULATION FOR STUDY IN ENGINEERING. J. L. Meriam 5, 297
STUDY OF TEACHING METHODS IN ENGINEERING. W. R. LePage and R. P. Lett 5, 317
SUMMER EMPLOYMENT—BOEING STYLE. H. P. Skamser and C. E. Work ..9, 514
SUMMER SCHOOLS AND SUMMER INSTITUTES, 1954 .....7, 372
SUMMER SCHOOLS AND SUMMER INSTITUTES 8, 480
SUMMER SCHOOLS FOR ENGINEERING TEACHERS. B. J. Robertson 1, 40

TEACHING OF REPORT WRITING: A COOPERATIVE PROGRAM. I. Sweet and K. E. Quier 10, 622
TEACHING STATISTICS TO ENGINEERS. W. G. Stanton, Sr. 8, 461
TEACHING TIPS, IS THE PROJECT METHOD EFFECTIVE. D. G. Huber 9, 553
TESTING STUDENT PROFICIENCY IN SURVEYING. M. S. Dickson 5, 325
THE STUDENT DEVELOPS HIS TOOLS. P. Nudd 5, 304
THE TECHNICIAN AND THE ENGINEER. C. J. Freund 2, 108
THIS ABOVE ALL. E. F. Obert 5, 294
TIMELY TIPS 7, 407
TRAINING IN RESEARCH. R. L. Pigford 3, 179
TRENDS IN TECHNICAL INSTITUTE EDUCATION. H. P. Rodes 8, 439
TYPES OF GRADUATE SUBSIDY. E. Weber 3, 188

UNDERGRADUATE COURSE IN PROCESS DESIGN. C. A. Walker 8, 449
UNIONIZATION OF PROFESSIONAL PERSONNEL. K. B. McEachron, Sr. ..3, 148
U. S. ARMY SCIENTIFIC AND PROFESSIONAL PERSONNEL PROGRAM 2, 120
UNIVERSITY CONTRIBUTION TO THE SUCCESS OF AN ENGINEER. H. E. Hoelscher 10, 620

VALIDITY OF EXAMINATIONS. I. Wladaver 3, 197
WRITING AS COMMUNICATION. J. I. Mattill 8, 476

Author Index 1953–1954

ABBOTT, J. P. Modern Engineering Physics 8, 442
ARMSBY, H. H. Future Scientists of America Foundation 3, 159
AXTELL, JR., J. D. Educational Research May Aid Engineering Teaching .8, 465

BARISH, N. N. Forecast of Freshmen and Graduates 3, 181
BARKER, J. W. Encouragement of Fundamental Research: Viewpoint of Private Foundation 1, 28
BENNETT, E. M. Motivation in Engineering Education 10, 612
BERNHARD, R. K. Comparison of American with European Teaching Methods in Engineering 8, 423
BOELTER, L. M. K., AND HAWKINS, G. A. General Mode of Analysis in Engineering Education 5, 343
BOLLAY, W. Graduate Education in Engineering 8, 455
BOYAJIAN, A. The Final Course 7, 394
BRENEMAN, J. W., WALKER, E. A., AND HOLDERMAN, K. L. Echelons of Engineering Education 4, 234
BROCK, E. H. Rating Teaching Personnel for Advancement 10, 593
BRONWELL, A. B. Keeping Abreast of Advancing Frontiers 2, 77
BURDELL, E. S. Grease Monkeys or Citizens? 9, 527

CALVERT, J. F. It is Time for the Laymen to Come In 7, 362
CAMBEL, A. B., AND DAWSON, F. M. Cooperative Research 2, 121
CHAPMAN, S. W. Humanistic-Social Division 3, 192
COOK, R. H., AND WILSON, W. E. Research in Small Colleges 4, 253
CRONIN, J. J. Experience Tells Me ...9, 507
CROUSE, C. S. Engineering Education and Engineer-in-Training Examinations: One Viewpoint of the Problem 2, 96

DAVIS, R. B. Education Beneath the Surface 5, 330
DAWSON, C. H. Servomechanisms in the Undergraduate Curriculum 10, 617
DAWSON, F. M., AND CAMBEL, A. B. Cooperative Research 2, 12
DICKSON, M. S. Testing Student Proficiency in Surveying 5, 325
DOUGHERTY, N. W. Accrediting of Engineering Curricula 5, 290
DOUGHERTY, N. W. Physics for the Civil Engineers 7, 401
DRAKE, L. E., AND THOMAS, W. F. Forecasting Academic Achievement ..4, 275

EVANS, T. H. Professional Collective Bargaining 7, 389

FOLSOM, R. G. Opportunities for University Research in Heat Power .9, 539
FORRESTER, J. D. Analysis of Mineral Industry Curricula 5, 332
FREUND, C. J. On Engineering Integrity 4, 221
FREUND, C. J. The Technician and the Engineer 2, 108

GILLAN, G. K. A Public Relations Program for the Engineering Profession 10, 628
GLOYNA, E. F. Opportunities for the Civil Engineer in Atomic Energy Industry 10, 590
GRANT, L. F. Industry, Engineers and the First Five Years of Professional Development 9, 503
GREEN, R. M. Discussion of Preliminary Report of A.S.E.E. Committee on Evaluation of Engineering Education 10, 606
GREEN, R. M. Engineering Education and Engineer-in-Training Examinations: Another Viewpoint of the Problem 2, 103
GRINTER, L. E. Dependence of Engineering Leadership on Mechanics and Physics 10, 570
GRINTER, L. E. Industry's Interest in More Education for Engineers ..9, 496
GRINTER, L. E. Membership Dues 3, 141

HANCHER, V. M. Liberal Education in Professional Curricula 7, 356
HARRISBERGER, L. Improving of the Product 2, 82
HAWKINS, G. A., AND BOELTER, L. M. K. General Mode of Analysis in Engineering Education 5, 343
HAWKINS, G. A., AND HOWLAND, W. E. Graduate Program in Engineering 7, 397
HAZEN, H. L. Encouragement of Fundamental Research: From Viewpoint of University 1, 19
HEACOCK, F. A. Role of Graphics in Engineering Education 10, 631
HOADLEY, G. B. Residence Credit Requirements 5, 314
HOELSCHER, H. E. The University Contribution to the Success of an Engineer 10, 620
HOLDERMAN, K. L., WALKER, E. A., AND BRENEMAN, J. W. Echelons of Engineering Education 4, 234
HOUSTON, R. W. Conference on Nuclear Physics in Engineering Education 10, 573
HOWLAND, W. E., AND HAWKINS, G. A. Graduate Program in Engineering 7, 397
HOYT, JR., J. W., AND MACDONALD, D. G. General Observations on Cooperative Education 9, 519
HUBER, D. G. Teaching Tips, Is the Project Method Effective? 9, 553
HUTCHISSON, E. Engineering Curriculum —Then and Now 10, 584

JONES, W. N. Attracting Competent Young Instructors 3, 157

LEACH, R. H. Engineering Education—Industry's Viewpoint 3, 174
LAMPE, J. H. Engineering Education and Engineer-in-Training Examinations: Introduction 2, 95
LEPAGE, W. R., AND LETT, R. P. A Study of Teaching Methods in Engineering 5, 317
LESSER, JR., A. Aims and Control of Engineering Economy 5, 307

MARTIN, R. J. Annual Meeting, June 14–18, 1954, University of Illinois ..9, 491
MATTILL, J. I. Writing as Communication 8, 476
MCEACHRON, SR., K. B. Unionization of Professional Personnel 3, 148
MERIAM, J. L. Stimulation for Study in Engineering 5, 297
MILLET, JR., M. L. Fundamentals and Professional Thinking 8, 431
MORGEN, R. A. National Science Foundation Program 4, 243
MORGEN, R. A. Needs for Basic Research in Engineering Science 7, 375
MURPHY, G. A Report on the University of Illinois Summer Institute Conference on Solid State Physics in the Engineering Curriculum 9, 494

NUDD, P. The Student Develops His Tools 5. 304
NYQUIST, E. B. National and Regional Developments in Cooperative Evaluation and Accrediting Activity ..9, 533

OBERT, E. F. This Above All 5, 294
O'BRIEN, M. P. Graduate Professional Education in Engineering 9, 545
OSBORN, J. C. Limitations and Possibilities of Accreditation 4, 277

PARMENTER, R. Research in a Large University 4, 248
PIGFORD, R. L. Training in Research .3, 179
PRUTTON, C. F. Encouragement of Fundamental Research: From Standpoint of Industry 1, 23
PUCHSTEIN, A. F. Books on Mathematics for Engineers 7, 404

REYNOLDS, D. P. Candid Comments ..9, 556
RITTER, R. L. Effective Counseling for Engineering Freshmen 10, 636
ROBERTSON, B. J. Summer Schools for Engineering Teachers 1, 40
RODES, H. P. Trends in Technical Institute Education 8, 439

SAWYER, JR., H. A. Axioms of Curriculum Change 10, 610
SCOTT, S. L. The Place of Advanced Degree Engineers in Industry 9, 523
SEEGER, R. J. On Education, Engineering and Physics 5, 285
SEEGER, R. J. Role of Physics in Engineering Education 7, 385
SHUPE, J. W. Instilling Desire for Student Self-Improvement 3, 165
SKAMSER, H. P., AND WORK, C. E. Summer Employment—Boeing Style .9, 514
SMITH, L. F., AND LIPSETT, L. Can Technical Institute Graduates Succeed in Engineering Colleges 10, 642

SMITH, R. J. Education for the Engineering Spectrum 2, 88
STANTON, SR., W. G. Teaching Statistics to Engineers 8, 461
SWEET, I., AND QUIER, K. E. The Teaching of Report Writing: A Cooperative Program 10, 622

THOMAS, W. F., AND DRAKE, L. E. Forecasting Academic Achievement ..4, 275
THURSTON, J. N. Engineering Laboratory Courses 8, 421
TOLPIN, J. G. Chemical Profession in the U.S.S.R. 8, 427
TONG, K. N. Mastering the Art of Thinking 3, 169
TURIN, J. J. Is Closer Integration an Answer? 5, 340

VAN VOORHIS, W. R. An Integrated Approach to Basic Mathematics ...10, 600

WALKER, E. A. Encouragement of Fundamental Research: Opening Remarks 1, 17
WALKER, E. A., HOLDERMAN, K. L., AND BRENEMAN, J. W. Echelons of Engineering Education 4, 234
WALKER, E. A. How Much Research Should Engineering Schools Do? 10, 565
WALKER, E. A. Undergraduate Course in Process Design 8, 449
WEBER, E. Types of Graduate Subsidy 3, 183
WELLMAN, B. L. Curriculum Designed for Today's Student 8, 469
WHIPPLE, W. Arts and Sciences for Engineers 10, 644
WILSON, W. E., AND COOK, R. H. Research in Small Colleges 4, 232
WOOLRICH, W. R. Education for Professional Engineering Responsibilities 1,
WORK, C. E., AND SKAMSER, H. P. Industrial Summer Opportunities 10, 58

ent of Fun-
pening Re-
.....1, 17
, K. L., AND
lons of En-
.....4, 234
ch Research
ools Do? 10, 565
te Course in
.....8, 449
e Subsidy 3, 133
m Designed
.....8, 469
Sciences for
.....10, 644
, R. H. Re-
es 4, 253
on for Pro-
Responsibil-
.....1, 6
R, H. P. In-
rtunities 10, 581